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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,437	06/10/2005	Atsushi Nakajima	05367/HG	3902

1933 7590 01/19/2007

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EXAMINER	
SHAH, MANISH S	
ART UNIT	PAPER NUMBER
2853	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/538,437	NAKAJIMA, ATSUSHI	
	Examiner	Art Unit	
	Manish S. Shah	2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 November 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanabe et al. (# US 2001/0047044) in view of Makishima et al. (# US 4279653).

Tanabe et al. discloses an inkjet recording method for forming image by ejecting an UV-setting ink-jet ink (see Abstract), which includes color materials ([0034]-[0036]), UV-polymeric compound, which is a radical polymeric compound (photo polymerization resin) (see Abstract; [0021]-[0029]), and photo-induced polymerization initiator (see Abstract; [0030]-[0033]) in a water-based medium (see Abstract; [0039]), on a base material and applying ultraviolet light to the ink on the base material ([0049]-[0056]; [0088]-[0090]).

Tanabe et al. differs from the claim of the present invention is that a concentration of oxygen dissolved in the ink is 0.1 to 2 ppm at 25 °C, preferably 0.5 to 2 ppm at 25 °C.

Makishima et al. teaches that to get the excellent ink jetting property, and high quality printed image, the concentration of oxygen dissolved in the ink is less than 0.013 ml/ml (column: 2, line: 50-68).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ink composition of Tanabe et al. by the aforementioned teaching of Mikishima et al. in order to have the ink with excellent ink jetting property, and which gives high quality printing.

2. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanabe et al. (# US 2001/0047044) in view of Noguchi ("UV curing technology for Inkjet Printing" Vol. 75, No. 8, page 394-400).

Tanabe et al. discloses an inkjet recording method for forming image by ejecting an UV-setting ink-jet ink (see Abstract), which includes color materials ([0034]-[0036]), UV-polymeric compound, which is a radical polymeric compound (photo polymerization resin) (see Abstract; [0021]-[0029]), and photo-induced polymerization initiator (see Abstract; [0030]-[0033]) in a water-based medium (see Abstract; [0039]), on a base material and applying ultraviolet light to the ink on the base material ([0049]-[0056]; [0088]-[0090]).

Tanabe et al. differs from the claim of the present invention is that a concentration of oxygen dissolved in the ink is 0.1 to 2 ppm at 25 °C, preferably 0.5 to 2 ppm at 25 °C.

Noguchi teaches that to get the excellent ink jetting property, and high quality printed image, the concentration of oxygen dissolved in the ink is 0.1 to 2 ppm (see Page: 394-400).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ink composition of Tanabe et al. by the aforementioned teaching of Noguchi in order to have the ink with excellent ink jetting property, and which gives high quality printing.

Response to Arguments

3. Applicant's arguments with respect to claims 1-2 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manish S. Shah whose telephone number is (571) 272-2152. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Manish S. Shah
Primary Examiner
Art Unit 2853

MSS
1/10/07